```
Management Options iConverter, Serial Agent
Network Management
1:  Chassis and Module Management
2:  Set Module Name Preferences
Management Module Preferences
3:  IP and Control Preferences
4:  SNMP Preferences
5:  Abandon Preference Changes
6:  Save Preference Changes
7:  Restore Factory Defaults
8:  Restart Management Module
9:  Other Networking Features
Management Module Maintenance
10: Firmware Update
11: Set Date/Time

IP Address  = 192.168.1.220
Chassis Number = 1

Enter Choice, <H>elp, E<x>it >
```

Figure C: Command Line Interface Menu Options

The CLI interface allows for the detailed configuration of the module. It is recommended to configure the module with an IP address associated with the attached network. Also, SNMP traphost address should be configured if the module is managed with an SNMP-based Management System. See the 10/100M User Manual for complete information.

4) VERIFY OPERATION

Once the module has been installed and configured per steps 1 - 3, verify the module is operational by viewing the LED indicators.

LED Function "Legend"	Color	OFF State	ON / Blinking State
Power "Pwr"	Amber	No power	On: Module has power
Network Ports Status*			
Fiber Optics "FO"	Green	No Fiber Link	On: Fiber link is active Blinking: Fiber Data Activity
10Mbps UTP "10"	Green	10Mbps not selected or disconnected	On: 10Mbps UTP link Blinking: UTP Data Activity
100 Mbps UTP "100"	Green	100Mbps not selected or disconnected	On: 100Mbps UTP link Blinking: UTP Data Activit
UTP Full-Duplex "FDX"	Green	Half-Duplex	Full-Duplex
*Review Link Modes section for other LED display patterns			

Figure D: LED Indicators

The Power LED indicates the module is receiving power.

The Fiber Optic link LED indicates the fiber optic connection has been established. Verify the Link Mode selection is set to Link Segment (LS). Until a stable link is established, leave the Link Mode configured for LS. After a Link presence is established, the Link Mode selection can be modified.

The UTP link LED indicates the module has established a connection across its UTP port.

Form 040-08900-001 K 12/07

Omnitron Systems Technology * 140 Technology Dr. #500 * Irvine, CA 92618
949.250.6510 tel * 949.250.6514 fax * www.omnitron-systems.com

Omnitron Systems Technology, Inc.

iConverter 10/100M Standalone Module QUICK START GUIDE

The Omnitron *iConverter*®10/100M is a carrier-class media converter and a Network Interface Device (NID) that provides 10BASE-T or 100BASE-TX (10/100) to 100BASE-FX Fiber media conversion with integrated management.

The 10/100M conforms to Ethernet in the First Mile (EFM) fiber standards to support Fiber-to-the-X (FTTX) Metropolitan access and Enterprise LAN networks. Built-in Operation, Administration and Maintenance (OAM) functionality enables the 10/100M to operate as a managed copper demarcation point at the customer premises and network edge, offering service provisioning functions, such as Quality of Service and Bandwidth Control (rate-limiting) capabilities.

The 10/100M can be managed using Omnitron's *NetOutlook*™ SNMP Management Software, 3rd Party SNMP Client, Telnet or the Command Line Interface (CLI).

For more information including the complete User Manual on the 10/100M module, access Omnitron's documentation download web page to view all relevant documents:

http://www.omnitron-systems.com/downloads.php

INSTALLATION PROCEDURE

1) Configure DIP-Switches
2) Install Standalone Module and Connect Cables
3) Configure Module via Command Line Interface
4) Verify Operation

1) CONFIGURE DIP-SWITCHES

DIP-SWITCH BANK 1

SW1 - UTP/FIBER PAUSE ENABLE

When a port is operating in Auto-Negotiation (AN), its Pause operation mode is determined by the Pause capability advertised during AN between itself and the link partner. The port advertises its Pause capability (Symmetrical or No Pause) during AN based on the Pause Disable/Enable DIP-switch setting.

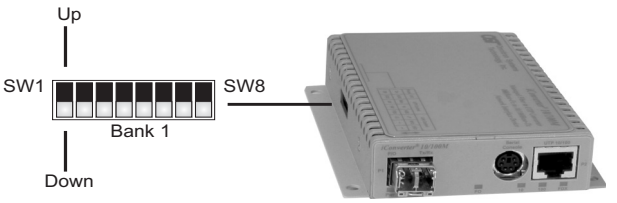

Figure A: DIP-Switch Location

When a port is operating in Manual mode, its Pause operation mode is based on the Pause Disable/Enable DIP-switch setting.

SW2 - FIBER FULL/HALF DUPLEX

Setting this DIP-switch to Half-Duplex “HDX” facilitates a connection that supports Half-Duplex. Setting this DIP-switch to Full-Duplex “FDX” facilitates a connection that supports Full-Duplex operation.

SW3 - UTP AUTO/MANUAL

When this DIP-switch is in the UTP Auto Negotiate “AN” position (factory default), the UTP port automatically determines the speed and duplex mode of the connecting UTP device. When the UTP “AN/Man” DIP-switch is in the Auto Negotiate “AN” position and the UTP 10/100 DIP-switch is in the “100” position, the UTP port auto-negotiates to 100Mbps or 10Mbps. When in the “10” position, the UTP port only operates at 10Mbps

When the UTP “AN/Man” DIP-switch is in the Auto Negotiate “AN” position, and the UTP Full/Half-Duplex DIP-switch is in the Full-Duplex “FDX” position, the UTP port auto negotiates to Full or Half-Duplex. When in the Half-Duplex “HDX” position, the UTP port functions only in Half-Duplex.

SW4 - UTP 10/100Mbps

When the UTP “AN/Man” DIP-switch is in the manual “Man” position, the “10/100" DIP-switch determines the speed of operation for the UTP port.

SW5 - UTP FULL/HALF DUPLEX

When the UTP “AN/Man” DIP-switch is in the manual “Man” position, the UTP Full/Half-Duplex “FDX/HDX” DIP-switch determines the duplex operation mode of the UTP port.

SW6, SW7, SW8 - LINK MODES

The module supports multiple link modes for fault detection and isolation. Link Segment should be used for the initial installation of the module. Once installed and operational, the link mode can be modified.

Switch	Down (Factory Default)	Up
SW1	**Off:** Pause Disable	**PAUS:** Pause Enable
SW2	**FDX:** Fiber Full-Duplex	**HDX:** Fiber Half-Duplex
SW3	**AN:** UTP Auto-Negotiate	**MAN:** UTP Manual
SW4	**100:** UTP 100Mbps	**10:** UTP 10Mbps
SW5	**FDX:** UTP Full-Duplex	**HDX:** UTP Half-Duplex
SW6	**See Link Mode Selection**	
SW7	**See Link Mode Selection**	
SW8	**See Link Mode Selection**	

SW6	SW7	SW8	Link Mode Selection
Down	Down	Down	**Link Segment (LS)** (Factory Default)
Up	Down	Down	**Link Propagate (LP)**
Down	Up	Down	**Remote Fault Detect + Link Segment (RFD + LS)**
Up	Up	Down	**Remote Fault Detect + Link Propagate (RFD + LP)**
Down	Down	Up	**Symmetrical Fault Detect (SFD)**
Up	Down	Up	**Illegal Setting**
Down	Up	Up	**Illegal Setting**
Up	Up	Up	**Illegal Setting**

Figure B: DIP-Switches

2) INSTALL STANDALONE MODULE AND CONNECT CABLES

a. The 10/100M Network Interface Device (NID) is available in tabletop and wall-mounting models. For wall-mounting, attach the NID to a wall, backboard or other flat surfaces. For tabletop installations, place the unit on a flat level surface. Attach the rubber feet to the bottom of the NID to prevent the unit from sliding. Make sure the unit is placed in a safe, dry and secure location.

   To power the unit using the AC/DC adapter, connect the AC/DC adapter to the AC outlet. Then connect the barrel plug at the end of the wire on the AC/DC adapter to the 2.5mm DC barrel connector (center-positive) on the chassis. Confirm that the unit has powered up properly by checking the power status LED located on the front of the unit.

   To power the unit using a DC power source, prepare a power cable using a two-conductor insulated wire (not supplied) with a 14 AWG gauge minimum. Cut the power cable to the length required. Strip approximately 3/8 of an inch of insulation from the power cable wires. Connect the power cables to the standalone unit by fastening the stripped ends to the DC power connector.

   Connect the power wires to the DC power source. The Power LED should indicate the presence of power.

   WARNING: Note the wire colors used in making the positive and negative connections. Use the same color assignment for the connection at the DC power source.

   NOTE: If mounting with a safety ground attachment, use the safety ground screw at the rear of the unit.

b. When using a 10/100M SFP model (8919-0), insert the SFP Fiber transceiver into the Port 1 SFP receptacle on the 10/100M.

   NOTE: The release latch of the SFP Fiber transceiver must be in the closed (up) position before insertion.

c. Connect the UTP port via a Category 5 cable to a 10BASE-T or 100BASE-TX Ethernet device.

d. Connect an appropriate multimode or single-mode fiber cable to the fiber port of the installed module. It is important to ensure that the transmit (TX) is attached to the receive side of the device at the other end and the receive (RX) is attached to the transmit side. Single-fiber (SF) media converter models operate in pairs. The TX wavelength must match the RX wavelength at the other end and the RX wavelength must match the TX wavelength at the other end.

3) CONFIGURE MODULE VIA COMMAND LINE INTERFACE

To access the Command Line Interface (CLI), connect the 10/100M RS-232 Console Port to the COM port of a computer equipped with terminal emulation software such as HyperTerminal. The Console Port (DCE) is a mini DIN-6 female connector which can be changed to a DB-9 connector with the included adapter. The 10/100M Console Port is a standard asynchronous serial interface.

Start HyperTerminal and select the correct COM Port in the HyperTerminal “Connect To:” window. Set the serial port to the following:

Bits Per Second	57,600
Stop Bits	1
Data Bits	8
Parity	NONE
Hardware Flow Control	NONE

Once connected, press *<ENTER>* to bring up a command line prompt on the attached PC.